



MINISTRY OF ENVIRONMENT AND NDU

ENVIRONMENTAL GUIDELINE No. 25

Bulk storage of pesticides and dangerous chemicals

1.0 Purpose of guideline

This environmental guideline for the bulk storage of pesticides and dangerous chemicals has been prepared by the Ministry of Environment & NDU to ensure that all environmental issues are duly taken into consideration by stakeholders.

2.0 Nature of development

Bulk storage of pesticides and dangerous chemicals involves warehousing and trade of chemicals. Such chemicals have to be carefully managed at all times to prevent any accidental release as they pose a serious threat to the environment.

3.0 Potential impacts

The major environmental issues associated with bulk storage of pesticides and dangerous chemicals are odour, solid and hazardous waste generation. The different aspects, impacts and nuisances related to such activities are listed below:-

| Activity | Aspects | Impacts/ Nuisances |
|---|--|---|
| Construction phase (where applicable) | <ul style="list-style-type: none"> - Generation of excavated soil/debris and construction wastes. - Use of heavy machinery. | <ul style="list-style-type: none"> - Dumping into barelands waterbodies and drains - Noise, mud ,dust |
| Operation Phase | | |
| Storage of pesticides and dangerous chemicals | <ul style="list-style-type: none"> - Release of gases/ vapour and particulate matter - Risk of spillage -Solid/Hazardous waste generation | <ul style="list-style-type: none"> - Impact on air quality - Odour, irritation and dust - Water and soil contamination - Fire hazards - Human safety - Land and water pollution |
| Cleaning and maintenance | <ul style="list-style-type: none"> - Contaminated water | <ul style="list-style-type: none"> -Risks of contamination of watercourses |

4.0 Siting of activity

Enterprises involved in the bulk storage of pesticides and dangerous chemicals should be located outside residential areas.

5.0 Environmental conditions

The major environmental issues are **odour, hazardous wastes generation** and the following environmental conditions shall be observed:-

- (i) All hazardous wastes shall be collected and disposed of as per the Environment Protection (Standards for Hazardous Wastes) Regulation 2001.
- (ii) A contingency plan shall be set up to combat any accidental spillage as stipulated under Section 30 (3) of the Environment Protection Act 2002.
- (iii) A wall/structure to contain overflows shall be provided around the storage area for liquid chemicals to contain any accidental spillage or leakage.
- (iv) Pesticide and dangerous chemical containers shall be kept tightly sealed when in storage and regular inspection shall be carried out periodically to ensure that there is no leakage, severe rusting or other defects.
- (v) All electric motors such as air- conditioning devices shall be housed in soundproof enclosures to keep noise level within permissible limits as per the Environment Protection (Environmental Standards for Noise) Regulations 1997. The noise exposure limits as per the above regulation are as follows:

| Industrial noise | | Neighbourhood noise | |
|------------------|---------------|---------------------|--------------|
| 7:00 – 21:00 | 60*dB (A) Leq | 7:00 – 18:00 | 60 dB(A) Leq |
| 21:00 – 7:00 | 55*dB(A) Leq | 18:00 - 21:00 | 55 dB(A) Leq |
| | | 21:00 – 7:00 | 50 dB(A) Leq |

* A tonal character adjustment of +5 dB(A) should be applied to the measured value where the noise has a definite continuous note such as a whine or hiss.

- (vi) No nuisance by way of noise dust, odour shall be caused to the public and surrounding environment during site preparation, infrastructural works and during operation of the activity.
- (vii) The Department of Environment of the Ministry of Environment and NDU shall be informed in writing of the dates of commencement of works on site and operation of the activity for monitoring purposes.

6.0 Enforcing agencies

Under Section 13 of the Environment Protection Act 2002, the enforcing agencies for the different environmental medium or pollutants are as follows:

| S. No | Environmental media/ pollutant | Enforcing Agency |
|-------|--------------------------------------|---|
| 1 | Noise, odour | Ministry of Health and Quality of Life |
| 2 | Effluents | Ministry of Public Utilities |
| 3 | Solid wastes and hazardous wastes | Ministry of Local Government |
| 4 | Pesticide residue | Ministry of Agro-industry and Fisheries (Agriculture Division) |

The above-mentioned enforcing agencies shall monitor compliance with the conditions falling under their purview.

7.0 Offences

Any person who fails to comply with any regulations/standards referred to in this guideline shall commit an offence and shall:

- (i) on a first conviction, be liable to a fine not exceeding 50, 000 rupees and to imprisonment for a term not exceeding two years.
- (ii) on a second or subsequent conviction, be liable to a fine not exceeding 100,000 rupees and to imprisonment for a term not exceeding 8 years.

For further information, please contact

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